# SECTION 3

# REGIONAL ACTIVITIES

As introduced previously, some programs are regional (not prioritized on a watershed basis) or are occurring in WMAs not currently targeted. For instance, some mandated non-discretionary activities, such as core regulatory and underground tank cleanups, are carried out throughout the region. Targeting of a WMA is for the purposes of identifying issues and problems and developing an implementation strategy with public involvement. To the extent possible, we have folded all activities into individual WMA plans. The following explanation of individual programs addresses those activities occurring outside of WMAs where the process of individual prioritizing by WMA has not occurred yet.

Assessment: Our intent for the future is to develop or promote the development of a watershed restoration action plan for every watershed in the Region, building upon true watershed assessments. Due to resource constraints, assessments of waterbody condition outside of targeted WMAs is on a case-by-case basis and generally associated with specific pollution events or localized concerns. Current assessments generally are mostly qualitative and in association with the regional Water Quality Assessment and Clean Water Act section 303(d) listings. Assessment of watersheds as ecological and economic units is essential to planning and resource allocation. At this time, such assessments are partially addressed in TMDL implementation plans, habitat conservation plans, and by local watershed groups and local agencies A new program spearheaded by the California Resources Agency, called the North Coast Watershed Assessment Program, will provide data from multiple sources for watershed assessment in targeted waterbodies. The local efforts are sometimes supported by NPS planning grants through section 205(j) of the CWA.

The North Coast Watershed Assessment Program is a multi-agency approach to gathering, developing, analyzing and presenting watershed assessments and data for north coast watersheds. In addition to the NCRWQCB, four agencies within the Resources Agency are involved: Department of Fish and Game, Department of Forestry and Fire Protection, Division of Mines and Geology, Department of Water Resources. Each has specific tasks relating to gathering existing data, filling information gaps by collecting new data, analyzing the data, and presenting the resulting watershed assessments in a standardized format for agency, landowners, and watershed groups. NCWAP will be closely coordinated with SWAMP and the outreach functions of the WMI Coordinator in the NCRWQCB. Activities associated with the NCWAP are detailed in individual WMA sections of this document.

Monitoring: The new Surface Water Ambient Monitoring Program (SWAMP) for the NCRWQCB consists of permanent sites with routine monitoring of core metrics for long-term trend detection and roving or rotating stations that will provide more detailed monitoring on a by-watershed basis, returning to each WMA on a five-year basis.

The permanent stations' data will be applicable to a trend analysis as well as testing differences within stations, among stations, and between watersheds. Selection of the metrics is based on a standard suite to provide a broad view of water quality and watershed health.

The rotating approach will be a stratified random design, with the major stratification being at the WMA scale. Selection of the metrics for this component of the program will be based on specific watershed characteristics, such as geology, hydrology, water supply, and land use patterns, drawing heavily from monitoring needs identified in the individual WMA sections in the WMI Chapter.

The 1.2 PY staffing will be used to coordinate the monitoring effort and assist in data collection, data analysis, and dissemination of data.

Specific objectives of the program are:

1. Develop baseline data for long-term trend detection of ambient water quality conditions in the Region
2. Identify and characterize water quality problem areas
3. Identify and characterize reference streams/stream reaches
4. Document water quality improvements
5. Make water quality information available to the public

Monitoring activities are detailed for each WMA in the individual sections of this document. Coordination with other monitoring programs is essential, including: State Mussel Watch, Toxic Substances Monitoring, Coastal Fish Consumption Monitoring, the Resources Agency North Coast Watershed Assessment Program, other agency programs and special studies.

The rotation of the program began in the north coastal WMA in FY 2000-01, and is moving into the Humboldt Bay and Eel WMAs in FY 2001-02, Klamath WMA in FY 2002-03, Trinity WMA in FY 2003-04, and Russian/Bodega WMA in FY 2004-05 with some exceptions. Screening for vitellogenin (xenobiotic estrogen surrogate) will begin in FY 2000-01 in the Russian/Bodega WMA as a special study to test its efficacy elsewhere. Stream gages were installed or existing gages funded where most needed to support the long-term stations in FY 2000-01, these will be modified as the rotation through WMAs occurs. Staff and contract expenditures for the entire SWAMP for FY 2000-01 are 1.2 PY and $420,000 in contract funds. Station locations and monitoring categories are detailed in Table 3-1 in Appendix E.

During the winter of 1996/97 significant volumes of sediment discharged from landslides and road networks into Freshwater Creek, Elk River, Jordan Creek, Bear Creek and Stitz Creek. The Regional Water Board received a great deal of public complaint of logging activities by the Pacific Lumber Company resulting in degradation of these streams. The Regional Board staff has attempted to require PALCO to conduct monitoring in these watersheds but have been unsuccessful. Freshwater Creek and Elk River are specifically listed under Section 303(d) as sediment impaired. Bear Creek, Jordan Creek and Stitz Creek are tributaries to the Eel River that are listed as sediment impaired. We would like to have at least one station in each watershed that monitors turbidity, suspended sediment and flow. There is a citizens group that is monitoring but they have limited funds to conduct adequate monitoring.

Tracking: As an adjunct to our monitoring efforts we will be utilizing a comprehensive set of databases to track trends in water quality, compliance with waste discharge requirements, and determine the effectiveness of restoration projects and installation of BMPs including applied NPS management measures and practices. These databases will include SWIMS, SINC, self- monitoring reports, THPs post-harvest inspections, and grant project reports via a survey form submitted to the State Water Resources Control Board (SWRCB). The SWRCB has a contract with the Information Center for the Environment (ICE) at U.C. Davis to track the effectiveness of management measures addressed in grant projects. This information will be available to us through the CERES database. The databases will also include data from volunteer monitoring efforts. Each regional board has the benefit of one-third of a PY to help implement volunteer monitoring in the region. Local Resource Conservation Districts are actively promoting volunteering monitoring and gathering of data. Any information from these data sources that is appropriate will be incorporated into the developing GIS system. For a discussion of the Geographic Information System see the end of this section.

In addition to the database work, the NCR through the reorganization process will be forming “watershed teams” that will meet on a regular basis to track all activity and efforts in each WMA, document changes and trends, and formulate new strategies. [Can we say we will have an information management team?]

Core Regulatory: Waste discharger permit issuance/updates and compliance inspections occur on a scheduled basis per the SWRCB Administrative Procedures Manual. Internally within the NCR dischargers are prioritized by category, those of highest priority receiving attention first (see Appendix A). As resources allow, staff will work through the priority list. Storm water program activities are targeting the highest priorities as well. Enforcement occurs on an as-needed basis, regardless of location.

Ground water: Significant efforts are occurring in the Underground Tank Program and other ground water programs. Though considerable work is done within the targeted WMAs, the prioritization of activities is not necessarily on a watershed basis. Groundwater and surface water contamination is suspected at former and existing mill sites that historically used wood treatment chemicals. Discharges of pentachlorophenol, polychlorodibenzodioxins, and polychlorodibenzofurans likely occurred with poor containment typically used in historical wood treatment applications. These discharges persist in the environment and accumulate in surface water sediments and the food chain. Additional investigation, sampling and monitoring, and enforcement actions are warranted, but insufficient

resources exist to address this historical toxic chemical problem. To the extent such activities are, they have been incorporated into the WMA sections.

Water Quality Certification: Certification pursuant to Clean Water Act sections 401 and 404 occur on an as-needed basis as well. Anticipated resource expenditures are detailed in the *Budget* section. Currently staff are attending program managers roundtables for 401 certifcations for the lower Russian River watershed, finalizing new 401 certification application package, and coordinating with the Army Corps of Engineers and CDFG regarding the Santa Rosa Plains wetlands. Projects potentially involving wetlands in all watersheds are reviewed. Funding does not currently exist for the following needed activities: inspections and enforcement of wetland related activities, and development of an integrated permitting program to streamline the permitting process.

Nonpoint Source: Non-timber nonpoint source activities occur entirely within the targeted WMAs. See Appendix D *Nonpoint Source Tables,* Tables 2 and 3 for short-term NPS objectives and education and outreach activities in each WMA. Table 7 outlines resource allocations for NPS activities. Timber harvest related nonpoint source activities are receiving increased attention in CWA section 303(d) listed waterbodies and are detailed in the individual WMA sections. Some timber harvest and timber sale related activities are occurring outside of the targeted WMAs, and the resources are identified in the *Budget* section.

We have an extensive Timber Harvest program where staff review and inspect timber harvest plans for implementation of the Forest Practice Rules and best management practices to ensure protection of water quality and beneficial uses. We are expanding our program activities on private land in concert with California Department of Forestry and Fire Protection. We are also expanding our review and inspection of timber sales as well as other projects on U.S. Forest Service lands.

The North Coast Region has 85%{check percentage, not all the Klamath is sediment impaired} of its watershed area designated as impaired by excess sediment from nonpoint sources under 303(d) of the CWA. The primary impaired beneficial uses are cold freshwater habitat, estuarine habitat, spawning, reproduction, and/or early development the salmonid species are listed as threaten or candidate species under the Federal Endangered Species Act and municipal water supply. The Regional Water Board is required to develop Total Maximum Daily Load (TMDL) plans to recover the beneficial uses. A primary net of monitoring stations are needed to document the recovery of streams due to effects of sediment. Possible approaches include measuring cross sections in depositional reaches of major streams. Measure width/depth ratios on depositional reaches over time. Repeat the Chris Knopp's study of 60 third order watersheds or a subset of the 60 and include turbidity, suspended sediment and flow as additional parameters.

Wetlands

The North Coast Region (NCR) contains many different variations of wetland habitat including but not necessarily limited to coastal freshwater and estuarine wetlands, seasonal wetlands, vernal pools, and prior converted or altered wetland habitat. Many of these wetland areas provide habitat for rare and endangered species as well as species of special concern. In the northern portion of the region the dominant wetlands are seasonal and coastal while in the southern portion of the region vernal pools and seasonal wetlands are the dominant types of wetland habitat present. The majority of these habitats are threatened throughout the region by increasing development and land conversion activities such as housing and commercial developments and vineyard production. In the Santa Rosa Plain, an area of 55,000 acres in Sonoma County, which extends from the Town of Windsor south to the City of Cotati, and from Santa Rosa west to Sebastopol, projects proposing the filling of vernal pools and seasonal wetlands are increasing.

Long-term goals are directed toward wetland protection, mitigation of necessary impacts, restoration and enhancement and overall resource management. These goals are consistent with the California Wetlands Conservation Policy that emphasizes the following:

- "Ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship and respect for private property."
- "Reduce procedural complexity in the administration of State and Federal wetlands conservation programs."

- "Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration."

Short-term (1-5 year) objectives that are linked to the long-term goals include the following:

- Creation of a detailed application package for proposed projects that have the potential to impact wetland habitat. The application is referred to as a Clean Water Act section 401 Water Quality Certification and/or Waiver of Waste Discharge Requirements (Dredge/Fill Projects). The application was finalized during the spring of 2001, and will be continually updated as regulatory changes occur that affect wetland regulations.
- Updating the NCR website to include expanded information on the Clean Water Act section 401 Water Quality Certification process and the Waiver of Waste Discharge Requirements for fill activities that have the potential to adversely impact wetland habitat. The website will contain detailed information outlining what types of activities will require a permit from the NCR, an overview of the application process, mitigation requirements for wetland impacts, information regarding the California Environmental Quality Act (CEQA), and related links to additional websites. This task is expected to be complete by January of 2002.
- Identification of the Beneficial Uses associated with wetland habitat in the NCR, which will be added to the Basin Plan for the NCR. This task is planned to be complete by December of 2002.
- Creation of a wetlands protection and management policy specific to the NCR, which will be added to the Basin Plan for the NCR through a Basin Plan Amendment. No completion date has been determined yet.
- Continue to review projects proposing to conduct dredge or fill within wetlands in order to ensure full protection of beneficial uses. This is an ongoing activity.

The NCR's Water Quality Certification Program (Clean Water Act section 401) has become more developed over the past two years as a result of regulatory changes to the overall CWA section 401 program in July 2000. These changes to the program resulted in two major changes to the CWA section 401 program including: 1) the elimination of the ability to waive a water quality certification, and 2) the delegation of certification rights from the State Water Resources Control Board (SWRCB) to the Regional Water Quality Control Boards. Since July of 2000, the NCR has taken a very active role in administering the CWA section 401 program, and has also used it's Porter-Cologne Authority in conjunction with the 401 authority, to insure the protection and proper management of the wetland resources in the NCR. Proposed projects potentially involving wetlands in all watersheds within the NCR are reviewed and appropriate actions are taken. The CWA section 401 program in the NCR is grossly under-funded. This leaves the protection and management of the NCR's wetland resources at jeopardy.

Funding does not currently exist for the following important activities: 1) thorough inspections and enforcement for all projects potentially affecting wetland habitat, 2) follow-up of mitigation projects to insure success criteria, 3) thorough review of wetland mitigation monitoring reports to insure success criteria have been met, and 4) development of an integrated permitting program or Regional General Permit to streamline the permitting process.

Currently staff at the NCR that work on CWA section 401 permit applications hold monthly in-house meetings to discuss all the pertinent issues of the program, exchange successes and problems, and outline needed changes to the program. In addition, staff attend the Statewide CWA section 401 roundtable held by the SWRCB, Regional Exchange meetings, and other Resource Agency meetings. The NCR has also become involved in the Interagency Mitigation Banking Review Team (MBRT), made up of the U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (DFG), U.S. Fish and Wildlife (USFWS), and the U.S. Environmental Protection Agency (USEPA), and has recently become a signatory agency in the review and approval of proposed mitigation banks. Lastly, the NCR staff have improved coordinating with the ACOE, DFG, USFWS, USEPA and affected municipalities and residents regarding the permit activities that affect wetlands on the Santa Rosa Plain and the northern portion of the region. Increased coordination among the regulatory and local agencies has led to an increased streamlining of the permitting process as well as insuring that appropriate mitigation measures where required on numerous projects.

<u>Wetlands Planning Activity Group:</u>

- Wetlands Identification:

  In the NCR the wetland identification relies primarily on the ACOE wetland delineations on a project by project basis. Staff at the NCR rely on the ACOE to verify wetland delineation's prepared by wetland consultants, which are then used during the permitting process at the NCR. To date there is no comprehensive database or Global Information System (GIS) to help NCR staff identify wetland features within the region. This holds true for other regulatory agencies as well. To address this problem, the ACOE, DFG, USFWS, and the NCR are working together to produce a series of GIS overlays that identify wetland habitat features on the Santa Rosa Plain. This undertaking is one of the many tasks being performed by the MBRT group, of which the NCR is a signatory agency.

- Wetlands Assessment:

  For the most part, the wetland habitats in the NCR are not assessed on a proactive basis to determine function, habitat suitability, and overall condition. Rather wetlands are generally assessed by wetland consultants who are hired by developers who want develop a site. Therefore most of the wetland assessments conducted in the NCR are those conducted as part of the requirements for site development, and are not conducted by the NCR staff directly. The assessments are reviewed by staff at the NCR to determine accuracy and thoroughness.

- Wetlands Monitoring:

  Wetland monitoring in the NCR occurs primarily as a result of regulations and conditions set forth by the regulatory agencies, which must be followed by project applicants who have created wetland mitigation projects, impacted wetland habitat, or performed wetland restoration on a site. Staff at the NCR review wetland monitoring reports to determine whether the information is accurate, whether the wetlands are achieving desired functions, and whether success criteria have been met. In addition, site inspections are performed to verify information presented in the wetland monitoring reports.

- Wetlands Total Maximum Daily Loads (TMDLs):

  The NCR does not have any wetland TMDLs at this time.

- Wetland Best Management Practices (BMPs):

  For the protection of wetland habitat within or adjacent to an impacted site, general erosion control type BMP measures are required by the NCR. Specific BMPs may be required on a project by project basis, depending on the situation, and those measures would be determined by line staff and upper management.

- Wetlands Standards:

  To date the NCR has not designated the beneficial uses of wetlands, and has not developed narrative and/or numerical water quality objectives specifically for wetlands. One of the short-term goals of the NCR is to designate the beneficial uses of wetlands and also update the Basin Plan for the NCR to include both the beneficial uses and narrative and numerical water quality objectives. The goal is to have both of these items complete within the next two years. While a formal list of the beneficial uses has yet to be created for the NCR, staff use their best professional judgement and refer to peer reviewed literature to help determine the beneficial uses of wetland habitat within the region.

- Coordination with Regulatory Agencies:

  Staff at the NCR routinely coordinate with numerous regulatory agencies and non-governmental organizations as part of the daily tasks associated with regulating activities related to wetland protection and management. Staff at the NCR are involved with several interagency groups, including the MBRT group, which reviews and approves wetland

mitigation banks. The involvement with the MBRT group requires extensive coordination between staff of several regulatory agencies, and non-governmental organizations and individuals. Through NCR staff involvement in coordination groups such as the MBRT, the wetland protection and management activities performed by the NCR are much more valuable and successful.

- Wetlands Permit Activities:

  For non-CWA section 401 certification permitting activities that involve wetland impacts, the NCR uses it's Porter-Cologne Authority through the issuance of Waste Discharge Requirements or Waiver of Waste Discharge Requirements. A prime example of when this situation would arise is for "isolated" wetland habitat which is no longer ACOE jurisdictional habitat as a result of the Supreme Court Decision, *Solid Waste Association of Northern Cook Counties v. United States Corps of Engineers* (SWANCC), issued on January 9, 2001. The Regional Water Quality Control Boards regulate isolated wetlands determined to be non-ACOE jurisdictional under their Porter-Cologne Authority. The ACOE still verifies wetland delineations for proposed projects, which the NCR then uses to determine the extent of wetland habitat and required mitigation measures for any incurred impacts to that habitat.

- Wetlands Mitigation:

  To insure that the policy of "no-net-loss" is met, all impacts to wetland habitat must be mitigated through a mitigation project of at least equal function, value, and overall area. In addition, all impacts to wetland habitat on the Santa Rosa Plain must be mitigated through wetland creation and wetland preservation at an approved wetland mitigation bank or wetland restoration site, at a minimum of a 1:1 ratio, with higher ratios depending on the quality of the existing wetland habitat proposed for filling. Project applicants are required to perform mitigation monitoring for a minimum of 5 years to insure that success criteria have been met. Monitoring reports are generally sent to the NCR staff on a yearly basis.

- Wetlands Training:

  Most staff at the NCR who work in the wetlands permitting programs have some form of academic and/or professional background in wetlands ecology and management. Formal training opportunities in wetland delineation, wetland ecology and function, wetland management, wetland mitigation and so on have been very scarce for NCR staff. There is a real need to increase the training opportunities available to line staff who have the responsibility of protecting California's wetland habitat.

<u>Water Quality Certification Activity Group:</u>

- Project review:

  Staff at the NCR review CWA section 401 permit applications on a project by project basis to determine thoroughness of the application projected wetland impacts, proposed wetland mitigation measures, and a host of other items. The staff member then determines whether the project can be approved as proposed. If the impacts are too extensive to be mitigated the project will likely be denied. In deciding whether to issue a permit for a project or what conditions are placed in the permit, the NCR staff must consider all potential impacts from the project to wetlands. Typically, the NCR requires that applications clearly discuss the feasibility of alternatives that would completely avoid or would minimize potential impacts to wetlands. If these types of alternatives are found not to be feasible, all existing and potential beneficial uses of the wetland habitat that may be lost or impacted as a result of the proposed project must be replaced by a mitigation project of at least equal function, value and overall area.

- Inspections:

Staff members at the NCR perform inspections at as many proposed project sites as is feasible. Not all sites are visited due to staff and funding limitations, but the high profile projects or those with higher levels of potential detrimental impacts are targeted for inspections before, during, and post- construction of the project. This helps to insure that the project will be constructed as proposed, and that the impacts to wetland habitat will be mitigated according to the proposal.

- Enforcement:

  Regulatory enforcement for the Water Quality Certification Program at the NCR is performed by staff members who are in the North and South Core Regulatory Units. Staff at the NCR issue CWA section 401 Water Quality Certifications and Waiver of WDRs in one permit, which enables the NCR to enforce the conditions placed in the permit through either it's CWA section 401 authority or Porter-Cologne Authority. Therefore staff have a variety of regulatory tools at their disposal to insure compliance with the conditions outlined in Water Quality Certifications/Waiver of WDRs including Cleanup and Abatement Orders, 13267 Orders Requesting a Technical Report, and Administrative Civil Liabilities. Recently staff in the southern Corps Regulatory Unit enforced against a developer for filling of wetlands without a permit. The developer was required to fund a wetland restoration project. Unfortunately, staff in the Core Regulatory Units typically have extensive workloads, which reduces the opportunities to perform effective enforcement tasks. Other Regional Water Quality Control Boards have entire units dedicated to enforcement activities, which helps to insure that all necessary enforcement activities are completed. Additional staffing and program funding at the NCR in the CWA section 401 program is necessary to help increase the detection and subsequent enforcement actions taken for non-compliance of permit conditions.

Wetlands Grant Project Management Activity Group:

Currently there are no wetland grants managed by staff at the NCR. However, staff at the NCR would like to secure grant funding for wetland restoration, creation, management, and monitoring activities in the future. Securing grant funds would allow staff at the NCR to design and implement wetland projects in the region that would be beneficial to the overall wetland management activities performed by staff at the NCR. In addition, projects could be contracted to local consultants, who would be responsible for performing the tasks of the project, and the staff at the NCR would oversee the projects.

Resource Needs For Wetland Management Activities

The SWRCB has prepared a needs analysis that quantified program needs for each Regional Board. Due to the rapid growth in some areas of the Region, the estimated needs are increasing over time.

Local Contracts: Clean Water Act sections 205(j) and 319(h), state Water Bond (Proposition 13) and other funding sources provide grant funds for projects in the NCR. All grants are targeted by WMA. Priority is given to 205(j) grant proposals that are for watershed assessments and for watershed enhancement plans. Prioritiy is given to 319(h) grant proposals that are for TMDL activities, fish habitat restoration and riparian enhancement, and for erosion and sediment control. See Appendix for targeted implementation and planning projects for FY 01-02.

Water Quality Planning: Completed in August 2001, the 2001 Triennial Review of the Basin Plan resulted in a Priority List of Planning Issues which describes the planning efforts the Regional Water Board intends to address. The following table describes the proposed near and long-term resource allocations for Basin Planning activities and includes all the issues from the Priority List. Priority numbers 1 – 7 are anticipated to be completed during the present triennial review period (2001-2004).

**2001 Triennial Review: Proposed Priority List of Planning Issues**

| Priority/ Rank | Issue # | Project | Est. Staff Effort | Est. Staff Resources Available |
|---|---|---|---|---|
| 1 (H) | 8 | Amend Table 2-1 & Beneficial Uses Section | 0.5* | 0.5 |
| 2 (H) | 18 | Develop Regionwide Action Plan for Control of Sediment Discharges | 2.0* | 2.0 |
| 3 (H) | 9 | Amend Section IV. Implementation Plans To Include TMDL Implementation Strategies for 303(d) Listed Waterbodies | 0.5*/ TMDL | 2.0 |
| 4 (H) | 13 | Develop Basin Plan to Recognize the California Toxics Rule | 1.0* | 1.0 (0.5 PY planning) |
| | 14 | Consider Revision to the Water Quality Objective For Toxicity | | |
| | 17 | Review Policy Regarding Water Quality-Based Effluent Limitations and Mixing Zones | | |
| | 16 | Review Chemical Objectives in Section 3 Water Quality Objectives- Title 22 Reference | | |
| | 15 | Compliance Schedule Issues | | |
| 5 (H) | 12 | Update Section IV. Implementation Plans, Nonpoint Source Measures with Regard to Logging, Construction, and Associated Activities and Herbicide Wastes from Silvicultural Applications | 1.0* | 1.0 (0.5 PY planning) |
| 6 (H) | 32 | Update the Water Quality Objectives for Groundwater to Include All Objectives Applicable to Identified Groundwater | 0.2 | 0.5 |
| 7 (H) | 26 | Add Water Quality Objectives for Bacteria | 0.5* | 0.5 |
| 8 (H) | 5 | Consider Revisions to the Water Quality Objectives for DO and Temperature | 1.0* | 0 |
| 9 (H) | 6 | Consider Specific Water Quality Objectives for Nutrients | 1.0* | 0 |
| 10 (H) | 27 | Add Water Quality Objectives for Ammonia and Total Residual Chlorine | 0.4* | 0 |
| 11 (H) | 24 | Update Trinity River Water Quality Objectives for Temperature | 0.5* | 0 |
| 12 (M) | 31 | Review Basin Plan For Consistency With Statewide Plans and Policies | 0.2** | 0 |
| 13 (M) | 3 | Review the Policy on the Control Of Water Quality with Respect to On-Site Waste Treatment and Disposal Practices | 0.2** | 0 |
| 14 (M) | 23 | Review the Water Quality Problems Resulting from Gravel Mining | 0.5** | 0 |
| 15 (M) | 10 | Review The Seasonal Waste Discharge Prohibitions in Section IV. Implementation Plans | 0.4** | 0 |
| 16 (M) | 36 | In-Stream Flows- Participate in Regionwide Discussions and Consider a BP Amendment | 0.4** | 0 |
| 17 (M) | 35 | Editorial Revisions and Minor Clarifications or Corrections to Text and Reference to New Laws, Plans and Regulations | 0.2* | 0 |
| 18 (M) | 4 | Update the Policy on the Disposal of Solid Wastes | 0.4* | 0 |
| 19 (M) | 33 | Review Policy For Waivers of WDRs for Specific Types of Discharges (Basin Plan Appendix II) | 0.5* | 0 |
| 20 (M) | 7 | Amend Section IV, Implementation Plans, Nonpoint Source Measures | 0.5** | 0 |

| | | | | |
|---|---|---|---|---|
| 21 (M) | 25 | Expand Antidegradation Policy Implementation Discussion | 0.2* | 0 |
| 22 (M) | 11 | Amend Section IV. Implementation Plans to Recognize California's Source Water Assessment Program | 0.5* | 0 |
| 23 (M) | 29 | Work with Environmental or "Green" Incentive Programs (such as Fish Friendly Farming) To Explore Adding Applicable Action Plans into the Basin Plan | 1.0** | 0 |
| 24 (M) | N/A | Consider Revising the Action Plan for the Santa Rosa Area | 0.5** | |
| 25 (L) | 34 | Add Biocriteria Objectives | 1.0* | 0 |
| 26 (L) | 30 | Consider Updating The Policy On Pesticide Application | 0.4** | 0 |
| N/P | 28 | Update Water Quality Objective for pH | N/A | |
| N/P | 2 | Review Water Quality Problems In The Klamath, Scott, And Shasta Rivers | N/A | |

* The estimated staff effort assumes completion of a Basin Plan Amendment through Board adoption
** Does not include time to complete a Basin Plan Amendment only staff review and discussion
H=high priority, M=medium priority, L=low priority

Coastal and Beach Areas: The North Coast Region has 340 miles of ocean beaches and numerous miles of fresh water beaches along rivers. These areas are sites of many beneficial uses including wildlife, estuarine, aquatic, marine and wetland habitats, protection of rare and endangered species, contact and noncontact recreation, commercial and sport fishing, shellfish harvesting, and navigation. Land use adjacent to these areas impacts these beneficial uses. For example, urbanization, agriculture or timber harvesting alters water flows, decreases water quality, and promotes the filling of bays and estuaries by sediment. Some of the main concerns are pollution from pathogens, nutrients, toxics including metals, pesticides and sediment. Issues in these areas are storm water runoff, dry weather urban runoff, oils seeps and spills, vessel traffic, pollution from marinas, sediment resuspension, low dissolved oxygen, flooding and failing septic systems. Both acute health risks from pathogens and chronic health risks from contaminated fish consumption are issues that must be addressed.

Control of nonpoint source pollution and monitoring are two methods of controlling the risks to the public and the environment. Monitoring must include monitoring of the water column and sediment, tissue analysis of fish and shellfish, and assessment of the benthic invertebrate community. This monitoring is partially covered by the State Mussel Watch and Toxic Substances Monitoring Programs, but there is a lack of proper resources for the concentrated monitoring effort that is needed at beaches, both ocean and fresh water beaches. The North Coast Region needs to increase monitoring, assessment, and reporting, and improve interactions with public health agencies about data coordination and when to post warning signs at beaches. A concerted effort needs to be done on public education, resource stewardship and habitat protection.

**Water Quality Legislation**

The Porter-Cologne Water Quality Control Act (California Water Code) was enacted by the State of California in 1969 and became effective January 1, 1970. This legislation authorizes the State Board to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the Regional Boards to develop regional Basin Plans. The California Water Code (§13170) also authorizes the State Board to adopt water quality control plans on its own initiative. In the event of inconsistencies among various State and Regional Board plans, the more stringent provisions apply.

The Clean Water Act (CWA), enacted by the federal government in 1972, was designed to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. One of the national goals states that wherever attainable water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water (i.e., fishable, swimmable). The CWA (§303[c]) directs states to establish water

quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319 (added by 1987 amendments) which mandates specific actions for the control of pollution from nonpoint sources. The 1987 amendments to the CWA (§307[a]) also mandate that states adopt numerical standards for all priority pollutants.

The USEPA has delegated responsibility for implementation of portions of the CWA to the State and Regional Boards, including water quality planning and control programs such as the National Pollutant Discharge Elimination System (NPDES). The Code of Federal Regulations (Title 40, CFR) and USEPA guidance documents provide direction for implementation of the CWA.

Besides state and federal laws, several court decisions provide guidance for basin planning. One decision reaffirmed the public trust doctrine, holding that the public trust is "an affirmation of the duty of the state to protect the people's common heritage in streams, lakes, marshlands, and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust." Public trust encompasses uses of water for commerce, navigation, fisheries, and recreation.

**Basin Plans**

Regional Board Basin Plans are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, Basin Plans (i) designate beneficial uses for surface and ground waters, (ii) set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and (iii) describe implementation programs to protect all waters in the Region. In addition, Basin Plan incorporate (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

Basin Plans are resources for the Regional Boards and others who use water and/or discharge wastewater. Other agencies and organizations involved in environmental permitting and resource management activities also use Basin Plans. Finally, Basin Plans provide valuable information to the public about local water quality issues.

Basin Plans are reviewed and updated as necessary. Following adoption by Regional Boards, the Basin Plans and subsequent amendments are subject to approval by the State Board, the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (USEPA).

As part of the State's Continuing Planning Process, components of Basin Plans are reviewed as new data and information become available or as specific needs arise. Comprehensive updates of Basin Plans occur in response to state and federal legislative requirements and as funding becomes available. State Board and other governmental entities' (federal, state and
local) plans, that can affect water quality, are incorporated into the planning process. In addition, Basin Plans provides consistent long-term standards and program guidance for the Region.

*Beneficial Uses*

Beneficial uses form the cornerstone of water quality protection under Basin Plans (see Appendix B for beneficial use definitions). Once beneficial uses are designated, appropriate water quality objectives can be established and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses. The designated beneficial uses, together with water quality objectives (referred to as criteria in federal regulations), form water quality standards. Such standards are mandated for all waterbodies within the state under the California Water Code. In addition, the CW A mandates standards for all surface waters, including wetlands.

Beneficial uses can be designated for a waterbody in a number of ways. Those beneficial uses that have been attained for a waterbody on, or after, November 28, 1975, must be designated as "existing" in the Basin Plans. Other uses can be designated, whether or not they have been attained on a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable) for regional waters. Beneficial uses of streams that have intermittent flows are designated as intermittent. During dry periods, however, shallow ground water or small

pools of water can support some beneficial uses associated with intermittent streams; accordingly, such beneficial uses (e.g., wildlife habitat) must be protected throughout the year and are designated "existing." In addition, beneficial uses can be designated as "potential" for several reasons, including:

- implementation of the State Board's policy entitled "Sources of Drinking Water Policy" (State Board Resolution No. 88-63),
- plans to put the water to such future use,
- potential to put the water to such future use,
- designation of a use by the Regional Board as a regional water quality goal, or
- public desire to put the water to such future use

The Sources of Drinking Water Policy states that "All surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic waters supply and should be so designated by the Regional Boards ...[with certain exceptions which must be adopted by the Regional Board]."

*Water Quality Objectives*

The CWA (§303) requires states to develop water quality standards for all waters and to submit to the USEPA for approval all new or revised water quality standards which are established for inland surface and ocean waters. Water quality standards consist of a combination of beneficial uses and water quality objectives, as well as an antidegradation policy. Water quality objectives may be expressed as either numeric limits or a narrative statement.

In addition to the federal mandate, the California Water Code (§13241) specifies that each Regional Board shall establish water quality objectives. The Water Code defines water quality objectives as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." Thus, water quality objectives are intended (i) to protect the public health and welfare and (ii) to maintain or enhance water quality in relation to the designated existing and potential beneficial uses of the water. Water quality objectives are achieved through Waste Discharge Requirements and other programs. These objectives, when compared with future water quality data, also provide the basis for identifying trends toward degradation or enhancement of regional waters.

*Triennial Review Process*

The California Water Code, (§13240), directs the State and Regional Boards to periodically review and update Basin Plans. Furthermore, the CW A (§303 [c]) directs states to review water quality standards every three years (triennial review) and, as appropriate, modify and adopt new standards.

In the Triennial Review Process, basin planning issues are formally identified and ranked during the public hearing process. These and other modifications to the Basin Plan are implemented through Basin Plan amendments as described below. In addition, the Regional Board can amend the Basin Plan as needed. Such amendments need not coincide with the Triennial Review Process.

*Basin Plan Amendments*

Amending Basin Plans involves the preparation of an amendment, an environmental checklist, and a staff report. Public workshops can be held to inform the public about planning issues before formal action is scheduled on the amendments. Following a public review period of at least 30 days, the Regional Boards respond to public comments. Subsequently, the Regional Boards can take action on the draft amendments at a public hearing.

The California Environmental Quality Act (as codified in the California Public Resources Code, §21080.5[d][2][i]) provides that the Secretary of Resources can exempt regulatory programs of state agencies from the requirements of preparing environmental impact reports, negative declarations, and initial studies should such programs be certified as "functionally equivalent." The Basin Planning process has been so certified.

Following adoption by Regional Boards, Basin Plan amendments and supporting documents are submitted to the State Board for review and approval. All Basin Plan amendments approved by the State Board after June 1, 1992 must also be reviewed and approved by the State Office of Administrative Law (OAL). All amendments take effect upon approval by the OAL. In addition, the USEPA must review and approve those Basin Plan amendments that involve changes in state standards to ensure such changes do not conflict with federal regulations.

*Site-Specific Objectives*
If a priority pollutant or criterion is inappropriate for a particular water (i.e., it does not protect the beneficial uses or, based on site-specific conditions, a less stringent standard may be warranted), a water quality objective that differs from the applicable criterion or objective may be developed for the site. Scientifically-defensible methods appropriate to the situation must be used to derive the objectives.

**State of Policy with Respect to Maintaining High Quality of Waters in California**

A key element of California's water quality standards is the state's Antidegradation Policy. This policy, formally referred to as the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Board Resolution No.68-16), restricts degradation of .surface or ground waters. In particular, this policy protects waterbodies where existing quality is higher than is necessary for the protection of beneficial uses.

Under the Antidegradation Policy, any actions that can adversely affect water quality in all surface and ground waters (i) must be consistent with the maximum benefit to the people of the state, (ii) must not unreasonably affect present and anticipated beneficial use of such water, and
(iii) must not result in water quality less than that prescribed in water quality plans and policies. Furthermore, any actions that can adversely affect surface waters are also subject to the federal Antidegradation Policy (40 CFR 131.12), developed under the CWA. The USEPA, Region IX, has also issued detailed guidance for the implementation of federal antidegradation regulations for surface waters within its jurisdiction.

**State Board Plans**

§303(c)(2)(B) of the Federal Clean Water Act requires that states adopt numeric criteria for priority pollutants as part of the states' water quality standards.

*Ocean Plan*

The State Board adopted the *Water Quality Control Plan for Ocean Waters of Califomia* in 1974 and amended this plan in 1988,1990, and 1997. This amended plan, which is referred to as the *Ocean Plan,* establishes beneficial uses and water quality objectives for waters of the Pacific Ocean adjacent to the California coast outside of enclosed bays, estuaries, and coastal lagoons. The Ocean Plan also prescribes effluent quality requirements and management principles for waste discharges and specifies certain waste discharge prohibitions. Prohibitions include discharges of specific hazardous substances and sludge, bypasses of untreated waste, and discharges that impact Areas of Special Biological Significance (ASBS).

*Estuaries and Inland Waters Plan*

In 1991, the State Board adopted the Inland Surface Waters Plan and the Enclosed Bays and Estuaries Plan; these plans were amended in 1993. In 1994, the State Board rescinded both plans in response to a court ruling invalidating the plans. California has been without statewide water quality standards for the majority of the priority pollutants since then (for non-ocean waters).

The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Phase 1 of the Inland Surface Waters Plan and the Enclosed Bays and Estuaries Plan) was adopted by State Board on March 2, 2000. The Policy is subject to review and approval by the USEPA, Region IX; meanwhile, the Policy went into effect upon the California Toxics Rule (CTR) being published in the Federal Register on May 18,2000. In addition, the Policy was effective on Apri1 28, 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the National Toxics Rule (NTR) and to the priority pollutant objectives established by Regional Boards in their Basin Plans.

The Policy represents the first phase in developing a new Inland Surface Waters Plan and Enclosed Bays and Estuaries Plan. In this phase, the USEPA promulgated numeric water quality criteria for priority pollutants for California in accordance with CWA §303(c)(2)(B) and the State Board adopted statewide measures to implement those criteria in a statewide policy. In Phase 2, State Board will consider the adoption of appropriate statewide water quality objectives for toxic pollutants. Like Basin Plans, the Policy provisions are subject to triennial reviews, which include public participation. In addition to the triennial review process, State Board intends to consider whether the policy should be revised upon the USEPA's promulgation of a final TMDL rule. The proposed rule was published in the Federal Register on August 23, 1999.

**"Alaska Rule"**

Previously, USEPA's water quality standards regulations provided that. a State's and Tribal's water quality standards were in effect once adopted by the State or Tribe. USEPA had 60 days to approve or 90 days to disapprove such standards. A State or Tribal water quality standard remained in effect, even if USEPA disapproved it, until the State or Tribe revised it or USEPA promulgated a Federal rule to supersede the State or Tribal standard.
Following a lawsuit in 1996 involving USEPA and a coalition of environmental groups, and a subsequent settlement agreement, USEPA revised its regulations concerning when State and Tribal water quality standards become effective for CWA purposes. Any State or Tribal water quality standards which went into effect under the old rule and was submitted to USEPA prior to March 30, 2000, remain in effect for CWA purposes, whether or not approved by USEPA, until replaced by federal water quality standards or approved State or Tribal standards. Any State or Tribal water quality standards that were submitted to USEPA after March 30, 2000, do not become "applicable" water quality standards for CWA purposes until approved by USEPA.

**Geographic information systems discussion**

*Technical and Administrative Aspects of the Activity*

GIS has proven to be a very effective tool for use by staff of the SWRCB and RWQCB's in preparing TMDL's and implementing the Watershed Management Initiative. SWRCB funding has gone to support integration of the GEOWBS (developed for USEPA 305(b) reporting) into a desktop data management tool.

Many kinds of information currently in use at the Regional Water Board are well suited to the kinds of analysis made possible by GIS. Some more familiar topics include: 1) the identification of sources of pollution, especially diffuse (non point) sources of pollution, through analysis of temporal and spatial data sets; 2) calculation of road density, coupled with predictive erosion potential estimates and prioritization of probable sources; 3) analysis of past, present and potential landslide areas; 4) assessment of trends in water temperature variations and analysis of their causes; 5) analysis of the singular and cumulative effects of water diversions on multiple other beneficial uses of water in the watershed; 6) studies of ground water contamination plumes, their sources, extent and interaction with surface waters, and; 7) the ability to integrate multiple issues within a watershed at one time. Rather than treating each issue individually, for example, site mitigation effects and studies of diffuse pollution can be integrated to both mitigate and protect resources. While existing program-focused database sets provide for some of these analyses to be performed now, the communication and prediction of effects of multiple aspects at the same time is best facilitated through GIS displays of relational database interactions.

*Current Activity Staffing and Cost*

Existing GIS resources represent a powerful and cost-effective tool to assist State and Regional Board staff in implementing the Watershed Management Initiative and preparing TMDL's for impaired water bodies. The TMDL development efforts at the NCRWQCB rely heavily on in-house and contract-based.

GeoWBS Program: The GIS-enhanced Water Body System database (GeoWBS) is designed to accomplish CWA Section 305 (b) assessment and Section 303 (d) reporting requirements. For the 2000 CWA Section 305 (b) water quality assessment update, the Regional Board entered the 1998 CWA Section 303 (d) listed water bodies and water bodies from watersheds identified in the 1999 WMI Chapters for review this year into the GeoWBS system. In addition, the GeoWBS will be used for the next CWA Section 305(b) and 303 (d) updates and for on going TMDL status reporting.